DECISION RECORD

Decision: It is my decision to authorize the issuance of a term grazing permit for public lands on Allotment 64061, known as the Gist Ranch c/o James Gist for Fred G. Gist, Velma Gist, James Gist and the Fred M. Gist Estate. The permit would be for 689 Animal Units (AUs) year long at 55% Federal Range for 4547 Animal Unit Months (AUMs) for the term of ten years. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

The fundamentals of rangeland health are identified in 43 CFR §§ 4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered (T&E) species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment.

In accordance with 43 CFR §§ 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR §§ 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR §§ 4160.3 (c))

Signed by T. R. Kreager — 8/10/99
Assistant Field Manager — Date

ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

ALLOTMENT 64061
Townships 11 and 12 South, Ranges 20, 21, 21½ and 22 East
Various Sections

EA-NM-066-98-105

OCTOBER, 1998

U.S. Department of the Interior
Bureau of Land Management
Roswell Field Office
Roswell, New Mexico

ENVIRONMENTAL ASSESSMENT
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I. Introduction

A. Purpose and Need for the Proposed Action

The grazing regulations (43 Code of Federal Regulations 4110) allow for a ten year permit to be issued for grazing inside the grazing district boundary. The Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS) (October, 1997) states a livestock grazing management goal of providing effective and efficient management of allotments to maintain, improve and monitor range conditions. A site specific analysis of the impacts of issuing a grazing permit to the applicant, James Gist for Fred G. Gist, Velma Gist, James Gist and the Fred M. Gist Estate, is needed for compliance with the National Environmental Policy Act (NEPA) and to make an informed decision.

This document will analyze the site specifics of authorizing the issuance of the permit on Allotment 64061 (Gist Ranch), other future actions such as range improvement projects will be addressed in a project specific environmental assessment. This allotment is within the Mixed Desert shrub vegetative community, the Drainages, Draws and Canyons community, and the Grassland community as identified in the Roswell RMP/EIS. Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community.

B. Conformance with Land Use Planning

The Roswell RMP/EIS has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision. The Roswell RMP/EIS states a livestock grazing management goal of providing effective and efficient management of allotment to maintain, improve and monitor range conditions. The proposed action is consistent with the RMP/EIS.

C. Relationships to Statues, Regulations, or Other Plans

The proposed action is consistent with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (TGA) (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (ESA) (16 U.S.C. 1535 et seq.) As amended; and the Public Rangeland Improvement Act of 1978 (PRIA) (43 U.S.C. 1901 et seq.)

II. Proposed Action and Alternatives

A. Proposed Action

The proposed action is to authorize a grazing permit on Allotment 64061 (Gist Ranch) for

Number and Kind of Livestock	Animal Units (AU's)	Period	Percent Federal Range	Type Use	Animal Unit Months (AUMs)
654 Cattle	654	yearlong	55%	Active	4316
100 Sheep	20	yearlong	55%	Active	132
15 Horses	15	yearlong	55%	Active	99
Allotment Total	689	yearlong	55%	Active	4547

689 Animal Units (AUs) year long at 55% Federal Range for 4547 Animal Unit Months (AUMs) for the term of ten years. The permit would be offered to James Gist for Fred G. Gist, Velma Gist, James Gist and the Fred M. Gist Estate

B. No Authorization Alternative

This alternative, if selected, would be to not issue a grazing permit for Allotment 64061. No grazing would be authorized on the federal land within the allotment.

III. Affected Environment

A. General Setting

Allotment 64061 is located in Chaves County, about ten miles west of Roswell, New Mexico. The allotment is made up of nine pastures, and two traps of various sizes. The allotment is watered by three base water wells, a water pipeline system, several dirt tanks and the Rio Hondo. The allotment consists of 15,625 acres of public land, 1,013 acres of Department of the Army, Corps. of Engineers (COE) acquired lands, 361 acres of withdrawn lands, 6,429 acres of state grazing lease lands and approximately 6,604 acres of private land (See attached map). The

northeastern pasture contains portions of the Two Rivers Project where the withdrawn and acquired lands are located.

The Rio Hondo bisects the northeastern pasture of the ranch, but no public land borders the river. The river lies entirely within either private land or lands which were acquired by the COE.

Allotment 64061 (Gist Ranch) lies inside the Roswell Grazing District Boundary, established subsequent to the Taylor Grazing Act, and it is administered under Section 3 of the TGA. The permitted use on a Section 3 permit is established by the amount of forage produced on the public lands and all other controlled lands, such as private, leased and state grazing leased lands. The public animal unit months are then derived from the amount of forage from the public lands in relationship to all forage produced that is available for livestock. During the late 1930's and 40's the Bureau of Land Management (BLM) and the allottee at that time agreed to the number of stock the ranch could run. Since then, BLM Roswell has been very involved in vegetation monitoring and range evaluations. Using this data adjustments to stocking rates and total numbers have been made on allotments throughout the resource area. BLM has established the number of stock allowed on the entire ranch, inclusive of all land status, excluding only lands which are not controlled by the allottee (not owned or leased). Under a Memorandum of Understanding between the Department of Interior, Bureau of Land Management and the Department of Army, Corps. of Engineers (COE), the BLM was given the jurisdiction responsibility for multiple use management, except recreation, on the withdrawn lands. BLM was only given the responsibility for administration of grazing and collection of grazing fees on the acquired lands.

Allotment 64061 consists of rolling grass covered hills, with a mixed desert shrub aspect. The average elevation ranges from 4,000 to 4,550 feet above sea level. Grass species make up 93 percent of the production in the existing plant community overall. The average recorded precipitation for the area is 12.58 inches (recorded in Roswell, NM). Most of the annual precipitation falls during high intensity, short duration thunderstorms occurring from May to October.

The following resources or values have been evaluated and are either not present or are not affected by the proposed action or alternatives in the EA: Prime/Unique Farmlands, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Riparian Zones/Wetlands, Hazardous Wastes, and Areas of Critical Environmental Concern. The impact of the proposed action and alternative to minority or low-income populations or communities has been considered and no significant impact is anticipated.

B. Affected Resources

1. Soils

The soils present on Allotment #64061 in Chaves County are the Bigetty-Pecos association, the Lozier-Tencee complex, the Pecos-Dev association, the Reakor-Pecos association, the Pecos

silty clay loam, nonsaline, 0-3 percent slopes, the Ector- Rock outcrop complex, 0-9 percent slopes and the Ector-Rock outcrop complex, 9-30 percent slope, and the Upton-Atoka association.

Soils on the uplands are generally very shallow to shallow, well drained, moderately permeable. They are nearly level to very steep cobbly loams and gravelly loams. Most are 4 to 20 inches deep over limestone, indurated caliche and rock outcrop. Soils in the valleys are deep, well drained and moderately well drained. They range from very slowly permeable to moderately rapidly permeable. These soils are level to nearly level of various textures on the flood plains. The loams, which are either cobbly or silty clay loams, vary from being rarely to frequently flooded.

More information on these soils can be found in the "Soil Survey of Chaves County, New Mexico, Southern Part".

2. Vegetation

The vegetation on the public land within Allotment #64061 fits four major range sites: the Shallow SD-3, Loamy SD-3, Salty Bottomland SD-3 and Limestone Hills SD-3. In the Shallow SD-3 Range sites black grama is the most abundant grass, while sideoats grama, hairy grama, blue grama, Halls panicum, wolftail, burrograss, sand dropseed, tridens, sand and ear muhly, tobosa and three-awn are also found. Shrubs such as catclaw acacia, yucca, broom snakeweed, littleleaf sumac, bear-grass and mesquite are also found on this range site. Forbs which may occur in this area are buckwheat, croton, wooly groundsel, bladderpod, and globemallow.

In the Limestone Hills SD-3 Range site, black grama is again the most abundant grass with good representations of sideoats grama, tridens, dropseed, love grass and three-awn. Other grasses such as tobosa, sand and ear muhly, Halls' panicum, hairy grama and wolftail were also noted on these sites. The shrub component is made up of yucca, cactus, with some mesquite, rhus, mormon tea, mariola and catclaw. Many of the same forbs found in the Shallow SD-3 range site were apparent in the Limestone Hills SD-3 Range site. The Limestone Hills SD-3 Range site, found on generally on the most shallow soils with the greatest amount of slope.

The Loamy SD-3 Range Site and the Salty Bottomland SD-3 Range Site grasses include tobosa, Wrights and alkali dropseeds, and blue grama among others. The forb component in all of the range sites varies from year to year, dependent upon the amount and timing of precipitation.

3. Wildlife

The area provides habitat for small animals, birds, rodents, and a sustainable population of mule deer and pronghorn antelope. The area does contain motts of brush or tree species that could provide quality cover for the larger animals. The allotment is within the Macho Habitat Area. The management goal for the WHA is to manage for a healthy population of pronghorn within the special management area. A majority of the allotment meets the suitability index for antelope transplants. Other game species occurring within the area include mule deer, mourning dove, and scaled quail. Raptors that utilize the area on a more seasonal basis include the

Swainson's, red-tailed, and ferruginous hawks, American kestrel, and great-horned owl. Numerous passerine birds utilize the grassland areas due to the variety of grasses, forbs, and shrubs. The most common include the western meadowlark, mockingbird, horned lark, killdeer, loggerhead shrike, and vesper sparrow.

The warm prairie environment supports a large number of reptile species compared to higher elevations. The more common reptiles include the short-horned lizard, lesser earless lizard, eastern fence lizard, coachwhip, bullsnake, prairie rattlesnake, and western rattlesnake.

A general description of wildlife occupying or potentially utilizing the proposed action area is located in the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1994).

4. Threatened and Endangered Species

The only known threatened or endangered species of plant or animals on Allotments 64061 is the bald eagle. A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2). Of the listed species, avian species such as the bald eagle and peregrine falcon may be observed in the general geographic area during migration or winter months. There are no designated critical habitat areas within this allotment. The swift fox is a Federal Candidate species that may occupy or utilize the area, refer to the Biological Opinion (AP11-38) in the Roswell RMP for a detailed description of the range, habitats and potential threats.

5. Livestock Management

The allotments are grazed by cattle and sheep, using a cow-calf and a sheep operation. The latest grazing permit on Allotment 64061 was for 689 animal units; most currently run were 673 cattle, 15 head of horses and 5 sheep. Pastures are grazed yearlong and numbers of livestock within the pasture are based on vegetative conditions so that overuse does not occur.

6. Visual Resources

Allotment 64061 is located in a Class III and a Class IV Visual Resource Management (VRM) Area. The Class III rating area is located on the east end of the allotment, and is generally surrounding the Two Rivers Project area. The Class IV rating area extends over the remaining portion of the allotment. The Class III rating means that contrast to the basic elements caused by a management activity may be evident and begin to attract attention in the landscape. The changes, however, should remain subordinate in the existing landscape. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, changes should repeat the basic elements of the landscape.

7. Water Quality

The Rio Hondo is a major tributary of the Pecos River, flowing through the allotment from west to east. It passes through Roswell before reaching the river approximately 17 miles to the east. The Hondo is ephemeral in the alluvial valley above the Two Rivers Project. Water withdrawals for irrigation of fields outside of the allotment reduce streamflows.

The New Mexico Water Quality Control Commission has designated uses for ephemeral and perennial reaches of the Rio Hondo (WQCC 1995). Designated uses below the perennial reach (Segment 2206) include irrigation, livestock watering, wildlife habitat, secondary contact (e.g., wading), and warmwater fishery. These include uses in the mainstem of the Pecos River which can be affected by flow contributed from the Rio Hondo.

Water quality assessments are performed by the State of New Mexico to determine whether designated uses are being supported. Water quality on the ephemeral reaches of the Rio Hondo is sufficient to fully support the its designated uses (WQCC 1994).

The river is located within one pasture, containing all private and COE acquired and withdrawn lands. Dirt tanks and the Rio Hondo are the only surface water on the allotment, some of the dirt tanks are located on the public land. The amount of water and period of retention in the dirt tanks is dependent on the weather conditions. Ground water is pumped from eleven drilled wells. The quality of the well water is adequate for livestock and wildlife use.

8. Floodplains

Within this allotment, floodplains exist that are recorded on Federal Emergency Management Agency maps. The identified floodplains are generally the major drainages along the Rio Hondo, Rocky Arroyo and Draw Fork. Water pipelines, fences and roads cross the floodplains, no adverse impacts have resulted from these improvements. Future permanent, above-ground structures will be authorized on BLM managed federal lands within the floodplains onlyif no practicable alternative exists. Only minor additional development, such as fencing, would be expected, but no projects are currently planned. The BLM has no management authority on the lands administered by the Corps. Of Engineers.

9. Air Quality

Air quality is good. The area is in a Class II area for the prevention of significant deterioration of air, as defined in the federal Clean Air Act. Class II areas allow a moderate amount of air quality degradation.

10. Recreation, Caves and Karst

Recreation: Dispersed recreational opportunities exist in Allotment 64061 as access to the public land is available through State lands and along county maintained roads. Dispersed recreational activities include hunting, caving, fishing, sightseeing, bird watching, primitive camping, mountain biking, horseback riding and hiking. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails. The majority of public lands in this allotment can only be accessed by foot (hiking, or walking).

Caves and Karst: A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. No known significant caves or karst features are known to exist on the public lands located within Allotment 64061. There is a medium potential that caves do exist on this allotment.

If at a later date, a significant cave or karst feature is located on public land within these allotments, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this exclosure fence.

Off Highway Vehicle designation for the public land within these allotments is classified as "Limited" to existing roads and trails.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soils

The soils will be influenced by livestock grazing directly by compaction, trailing that may break through the turf, chipping of soil surface caused by hoof action, and recycling of nutrients. Infiltration rates will be increased by chipping of soil surface over most of the area but will be decreased by compaction around watering, trailing, and bedding areas. The area of compaction would be relatively small. Livestock remove vegetation that would have reduced the erosive forces of wind, rain and surface runoff. Proper utilization levels and grazing distribution patterns under the present operation retain sufficient vegetative cover so as to maintain the stability of the soils. The level of grazing identified in the proposed action would continue to maintain an adequate ground cover for protection and the development of the soils. The percentage of bare ground and rock found on the public land within the allotment fall within the parameters established by the RMP/EIS for this vegetative community.

2. Vegetation

Vegetation grazing by domestic livestock and wildlife is not adversely affected unless the amount of utilization is severe over an extended period of time. Vegetative studies on this allotments were established in 1982. Ecological condition as shown by the data collected from 1982 through 1997 indicate the vegetation is sustainable to meet the multiple resource requirements and forage for 689 Animal units. The most recent data shows the ecological condition for the area evaluated to be in good condition, having remained stable between ratings of 52 to 57. Copies of the monitoring data and the analysis of the data are available at the Roswell Field Office.

The following table summarized monitoring data for the Gist Allotment; these averages are weighted in relation to pasture size:

Monitoring Data Summary, Allotment Averages from 1982 to 1993							
	Grasses	Forbs	Shrubs	Trees	Litter	Bare Ground	Rocks
Percent composition of vegetative cover	88.22	0.49	9.87	1.42	N/A	N/A	N/A

Percent Ground Cover	13.32	3.54	8.89	33.73	40.52

3. Wildlife

Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and it's habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover habitat for wildlife will remain the same as the existing situation. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock

4. Threatened and Endangered Species

Livestock grazing as a result of the grazing permit, May affect, but not likely adversely affect the bald eagle and peregrine falcon. It is expected that habitat and range condition would be maintained or improved by authorizing grazing conducive with vegetation production goals. Habitat for wintering bald eagles would not have significant negative impacts by livestock grazing since there is no presence of riparian and aquatic habitats nearby, and no active or suitable nesting habitat. Positive impacts may result to the bald eagle from the proposed action by increasing the amount of carrion during the late winter and early spring in sheep allotments. The important riparian habitat that is required for the peregrine falcon is located all on private lands and not under surface management control of the Bureau of Land Management.

5. Livestock Management

The proposed action would allow the existing livestock management to continue. The existing management is not causing any adverse impacts to the environment. The distribution and supply of livestock water is available for wildlife. Livestock under rotation grazing will continue to maintain or increase ground cover by stimulating growth of vegetation and by scattering litter which protects the soil from wind and water erosion.

6. Visual Resources

Visual resources will be managed to meet the Visual Resource Management class. All proposed management activities will be evaluated with regard to visual resource management and those project that are compatible with the character of the natural landscape will be encouraged. No management actions should be proposed that would degrade visual quality to the extent that a change in any VRM class will result. The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Water Quality

Livestock grazing will not have an significant influence on water quality. Any surface water is located in the Rio Hondo, irrigation canals and dirt tanks on private land which have received the limited amount of runoff. The amount of sediment into the river, canals, and dirt tanks is directly related to the intensity and duration of the precipitation occurrence and affected only

slightly by livestock grazing activities. Ground water is pumped from the eleven wells. The ground water is not affected by livestock grazing.

8. Floodplains

No impacts to the floodplains are known; by keeping above ground structures out of the floodplains, impacts should not occur.

9. Air Quality

The proposed action will not have an effect on the air quality. The air quality will remain virtually the same as present.

10. Recreation, Caves and Karst

Grazing should have little or no impact on the dispersed recreational opportunities within Allotment 64061, since the recreational use of these public lands are relatively low. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views or hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

No known significant caves or karst features are known to exist on the public lands located within Allotment 64061. Grazing would not affect the karst resources.

B. Impacts of the No Livestock Grazing Alternative

1. Soils

The soil will not be subjected to compaction, chipping or standing vegetation reduction that is associated with livestock grazing. The stability and development of the soil would be about the same as with grazing. Soil compaction would be reduced on the allotment around drinking troughs and along trails.

2. Vegetation

There would be small change in the types and amounts of vegetation found within the allotment. It is expected that the number of plant species found within the allotment will remain the same. Vegetation will continue be utilized by wildlife but the removal of the standing vegetation by livestock would be absent. This would result in an increase in the amount of standing vegetation and an increase in the accumulated litter on the ground.

3. Wildlife

There would be no competition between livestock and wildlife for forage or cover.

4. Threatened and Endangered Species

There would be no change to the bald eagle or the peregrine falcon habitat if the no grazing alternative was selected.

5. Livestock Management

Under the no grazing alternative there would be no grazing on the federal land in the area of Allotment 64061. This would have an adverse economic impact to the livestock operation.

6. Visual Resources

No change in the visual resources, scale, land-form, and color will occur with the no grazing alternative.

7. Water Quality

A slight improvement in surface water quality will be achieved with the no grazing alternative. This is anticipated because the removal of standing vegetation will not be occurring to the degree allowed in the proposed action. More standing vegetation will slow runoff during precipitation events which will reduce sediments into the water. Ground water will not be changed by the no grazing alternative.

8. Floodplains

Impacts would be the same as the proposed action.

9. Air Quality

There would be no change to the air quality with the no grazing alternative.

10. Recreation, Caves and Karst.

This alternative would have no effect on recreation, caves or karst features.

V. Cumulative Impacts

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement (p. 28) and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS (pp. ROD-2). The no livestock grazing alternative was not selected in either document.

All of the allotments that have permits or leases with BLM will have to go through scoping and analysis under NEPA. Allotment #64061 is surrounded by allotments that will be undergoing this process. If the proposed action is selected, there would be no change in the cumulative impacts since it does not vary from the current situation.

If the no livestock grazing alternative is selected, there would be little change in the cumulative impact as long as the surrounding allotments continue to be stocked at their current level. If the permitted numbers are reduced or eliminated on the surrounding ranches as well, the economics of the surrounding communities and or minority/low income populations would be negatively impacted.

VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's, if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action.

VII. Mitigating Measures

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rational for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The proposed action will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997)

_____ _____

T. R. Kreager, Date
Acting Assistant Field Office Manager - Resources